10/712,087 YAO-3750US3

Application No.: Amendment Dated:

October 27, 2006

Reply to Office Action of: June 30, 2006

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1-77. (Cancelled)

78. (Currently Amended) A laser light source, comprising:

a distributed feedback type semiconductor laser for emitting laser light;

a semiconductor laser amplifier for amplifying the laser light; and

an optical wavelength conversion element for receiving the amplified laser light so as to generate a harmonic wave, the optical wavelength conversion element having periodic domain inverted structures,

wherein the distributed feedback type semiconductor laser is wavelength-locked, and

wherein an RF superimposition is performed for the distributed feedback type semiconductor laser

wherein the optical wavelength conversion element is formed of a stable proton exchange layer whose refractive index does not vary with time during operation.

- 79. (Previously Presented) A laser light source according to claim 78, wherein the optical wavelength conversion element has a modulation function.
- 80. (Previously Presented) A laser light source according to claim 78, wherein the optical wavelength conversion element is formed in an LiNb<sub>x</sub>Ta<sub>1-x</sub>O<sub>3</sub> ( $0 \le X \le 1$ ) substrate.
  - 81. (Cancelled)
  - 82. (Previously Presented) A laser light source according to claim 78,

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wherein an optical waveguide is formed on the optical wavelength conversion element, and

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wherein a width and a thickness of the optical waveguide are each 40 µm or greater.

- (Previously Presented) A laser light source according to claim 82, 83. wherein the optical wavelength conversion element has a modulation function.
- (Previously Presented) A laser light source according to claim 82, 84. wherein the optical wavelength conversion element is formed in an LiNb<sub>x</sub>Ta<sub>1-x</sub>O<sub>3</sub> (0  $\leq$  X  $\leq$  1) substrate.
- (Previously Presented) A laser light source according to claim 82, 85. wherein the optical waveguide is of a graded type.

86-87. (Cancelled).